VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

Specification at page 6, line 24:

2) Perfluorinated or partially fluorinated polymers containing aromatic rings such as those described in WO 95/08581[, WO 95/08581] and WO 97/25369 (Ballard Power Systems) which have been functionalised with SO_3H, PO_2H_2, PO_3H_2, $CH_2PO_3H_2$, COOH, OSO_3H, OPO_2H_2, OPO_3H_2. Also included are radiation or chemically grafted perfluorinated polymers, in which a perfluorinated carbon chain, for example, PTFE, fluorinated ethylene-propylene (FEP), tetrafluoroethylene-ethylene (ETFE) copolymers, tetrafluoroethylene-perfluoroalkoxy (PFA) copolymers, poly (vinyl fluoride) (PVF) and poly (vinylidene fluoride) (PVDF) is activated by radiation or chemical initiation in the presence of a monomer, such as styrene, which can be functionalised to contain an ion exchange group.

Specification at page 8, line 8:

The solid polymer electrolyte membrane prepared by the process of the present invention may be employed as is or as a component of the ion-exchange membrane of a solid polymer electrolyte chemical cell, such as a PEMFC. Accordingly, the present invention further provides a membrane prepared by the process of the present invention. The membrane prepared by the process of the present invention is [suitably] suitable for use in a fuel cell. When for use in a fuel cell, the total thickness of the membrane is suitably less than 200μm and preferably less than 100μm.

IN THE CLAIMS:

1. (Amended) A process for preparing a solid polymer electrolyte membrane comprising an ion-conducting polymer, a catalyst and a high surface area supported material, which process comprises:

(a) associating the catalyst with the support material to form a catalysed support; and

(b) combining the catalysed support with [an] the ion-conducting polymer [composition].

2. (Amended) A process according to claim 1, [which comprises, as] wherein step (b)[,] comprises combining the catalysed support with [an] the ion-conducting polymer in a liquid medium that is aqueous-based and is essentially free from organic solvents.

3. (Amended) A process according to claim 1 [or claim 2], wherein the catalyst comprises one or more precious metals, or combinations thereof, and/or other transition group metals.

4. (Amended) A process according to [any preceding] claim 1, wherein the catalyst comprises platinum.

5. (Amended) A process according to [any preceding] claim 1, wherein the catalyst is deposited onto the support material to a loading of between 0.01 to 50.0% by weight of the total catalysed support.

8. (Amended) A process according to [any preceding] claim 1, wherein the amount of catalysed support incorporated into the membrane is such that the metal loading is lower than $0.1 mg/cm^2$.

9. (Amended) A process according to claim 8, wherein the amount of catalysed support incorporated into the membrane is such that the metal loading is lower than $0.05 mg/cm^2$.

10. (Amended) A process according to claim 9, wherein the amount of catalysed support incorporated into the membrane is such that the metal loading is lower than $0.03mg/cm^2$.

11. (Amended) A process according to [any preceding] claim 1, wherein the high surface support material is non-electrically conducting.

12. (Amended) A process according to [any preceding] claim 1, wherein the high surface area support material is selected from the group consisting of silica, titania, alumina, zirconium oxides, zirconium silicates, tungsten oxides, tin oxides and zeolites.

13. (Amended) A process according to [any preceding] claim 1, wherein the support material is in the form of fibres.

14. (Amended) A process according to [any one of claims 1 to 12] claim 1, wherein the support material is in the form of particles with a mean particle size in the range of from 0.001μm to 10μm.

16. (Amended) A process according to [any preceding] claim 1, wherein the ion-conducting polymer [composition is] comprises an essentially aqueous solution of a perfluorinated co-polymer with ion-exchange groups.

17. (Amended) A process according to [any preceding] claim 1, wherein the catalysed support[,] is in particle or fibre form[, is added] and step (b) comprises directly adding the catalysed support to a solution of the ion-conducting polymer electrolyte.

18. (Amended) A process according to [any of claims] claim 1 [to 11 or 13 to 15], wherein the catalysed support is in particle form and is applied as a binder to form a fibre network to which the ion-conducting polymer is subsequently applied to produce the membrane.

19. (Amended) A process according to [any of claims] claim 1 [to 13 or 16], wherein the catalysed support is in fibre form and itself is formed into a fibre network which is thereafter bound with a binder, and the ion-conducting polymer is subsequently applied to produce the membrane.

20. (Amended) A membrane prepared by a process according to [any preceding] claim 1.

21. (Amended) A membrane electrode assembly comprising a membrane prepared by a process according to [any one of claims] claim 1 [to 19].

22. (Amended) A fuel cell comprising a membrane prepared by a process according to [any one of claims] claim 1 [to 19].